

Amendments to the Claims:

The following listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Original) A blood water content detection device comprising:
a pulse wave detection section which noninvasively detects a peripheral pulse wave; and
an index extraction section which extracts an index which changes depending on a blood water content from the detected pulse wave.
2. (Original) The blood water content detection device as defined in claim 1, wherein the index extraction section extracts the index based on a pulse height of a dicrotic notch in the pulse wave.
3. (Original) The blood water content detection device as defined in claim 2, wherein the index extraction section extracts as the index a first ratio of a pulse height of a first rise point of one cycle of the pulse wave and a pulse height of the dicrotic notch.
4. (Original) The blood water content detection device as defined in claim 1, wherein the index extraction section extracts the index based on a pulse height of an ejection wave in the pulse wave.
5. (Original) The blood water content detection device as defined in claim 4, wherein the index extraction section extracts a first ratio of a pulse height of a first rise point of one cycle of the pulse wave and a pulse height of the ejection wave.
6. (Original) The blood water content detection device as defined in claim 3, wherein the index extraction section further extracts a reference index which is less dependent on the blood water content than the first ratio, and outputs a ratio of the index to the reference index.
7. (Original) The blood water content detection device as defined in claim 5,

wherein the index extraction section further extracts a reference index which is less dependent on the blood water content than the first ratio, and outputs a ratio of the index to the reference index.

8. (Original) The blood water content detection device as defined in claim 6, wherein the index extraction section extracts as the reference index a second ratio of the pulse height of the first rise point of one cycle of the pulse wave and a pulse height of a dicrotic wave.

9. (Original) The blood water content detection device as defined in claim 7, wherein the index extraction section extracts as the reference index a second ratio of the pulse height of the first rise point of one cycle of the pulse wave and a pulse height of a dicrotic wave.

10. (Currently Amended) The blood water content detection device as defined in claim 1, further comprising:

a low-cut section which removes a low frequency component due to changes caused by activities of an autonomic nervous system (~~excluding movement of blood vessels~~) from the pulse wave detected by the pulse wave detection section.

11. (Original) The blood water content detection device as defined in claim 10, wherein the low-cut section further removes a low frequency component caused by body movement of a subject in a resting state.

12. (Original) The blood water content detection device as defined in claim 10, wherein the low-cut section sets the low-cut frequency range from 0.4 to 0.5 Hz.

13. (Original) The blood water content detection device as defined in claim 10, wherein the low-cut section is formed of a bandpass filter which sets the high-cut frequency range from 16 to 30 Hz.

14. (Original) The blood water content detection device as defined in claim 1, further comprising:

a first differentiation section which differentiates the pulse wave; and

a second differentiation section which differentiates the pulse wave differentiated by the first differentiation section, wherein:

a second differential waveform which is output from the second differentiation section has five inflection points having pulse heights “a” to “e” sequentially output on a time base within one cycle; and

the index extraction section extracts the index based on at least one of the five pulse heights.

15. (Original) The blood water content detection device as defined in claim 14, wherein the index extraction section extracts a pulse height ratio (d/a) .
16. (Original) The blood water content detection device as defined in claim 14, wherein the index extraction section extracts a pulse height ratio (b/a) .
17. (Original) The blood water content detection device as defined in claim 14, wherein the index extraction section extracts a pulse height ratio $[(d/a)/(b/a)]$.
18. (Original) The blood water content detection device as defined in claim 14, wherein the index extraction section extracts a pulse height ratio $[(d/a)/(e/a)]$.
19. (Original) The blood water content detection device as defined in claim 14, wherein the index extraction section extracts a pulse height ratio $[(b/a)/(e/a)]$.
20. (Original) The blood water content detection device as defined in claim 1, wherein the index extraction section extracts as the index a cardiac ejection time from the pulse wave.
21. (Original) The blood water content detection device as defined in claim 1, wherein the index extraction section extracts as the index a cardiac diastolic time from the pulse wave.
22. (Original) The blood water content detection device as defined in claim 1, wherein the index extraction section extracts as the index a ratio of a cardiac ejection time to one cycle of the pulse wave from the pulse wave.
23. (Original) The blood water content detection device as defined in claim 1, wherein the index extraction section extracts as the index a ratio of a cardiac diastolic time to one cycle of the pulse wave from the pulse wave.

24. (Original) A hemodialysis timing determination device comprising:
the blood water content detection device as defined in claim 1; and
a determination section which determines the timing of hemodialysis based on
the output of the blood water content detection device.

25. (Original) The hemodialysis timing determination device as defined in
claim 24,
wherein the determination section compares the index output from the blood
water content detection device with a comparative value corresponding to a blood water
content upper limit, and determines the time when hemodialysis is necessary based on the
comparison result.

26. (Original) The hemodialysis timing determination device as defined in
claim 24,
wherein the determination section compares the index output from the blood
water content detection device with a comparative value corresponding to a blood water
content lower limit, and determines the time when hemodialysis is completed based on the
comparison result.